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FESTO CHANGE-O? NO WAY! WHY THE SUPREME COURT SHOULD REVERSE THE FEDERAL CIRCUIT'S ATTACK ON THE DOCTRINE OF EQUIVALENTS

Conrad J. DeWitte, Jr.⁺

I. INTRODUCTION

A. The Purpose of Patents

Under Article I of the Constitution, the United States government has the authority to grant patents.¹ The government grants patents to promote technological advancement and to encourage disclosure of inventions, and it accomplishes these goals by offering an exclusive, legal right to each invention for a limited period of time.²

Congress has delegated the constitutional authority to grant patents to the United States Patent and Trademark Office (USPTO), which has developed an orderly process for examining patent applications.³ A patent examiner reviews each patent application, including the patent claims, to ensure that it meets a number of formal and substantive requirements.⁴ To ensure compliance with the substantive requirements,

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1. "The Congress shall have Power . . . [t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. CONST. art. I, § 8, cl. 8.

2. See *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 607 (1950).

3. "The United States Patent and Trademark Office is established as an agency of the United States, within the Department of Commerce." 35 U.S.C. § 1(a) (2000). See generally MANUAL OF PATENT EXAMINING PROCEDURE (U.S. Dep't of Commerce, U.S. Patent & Trademark Office, 8th ed., 2001) [hereinafter MPEP].

4. Petitioner's Brief at *4, *16, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025738 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966) for the proposition that patentability involves the subject matter provisions of the code only); see also Tr. of Oral Argument, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), 2002 WL 22010, at 5 (U.S. Jan 8, 2002). Counsel for Festo Corporation argued that 35 U.S.C. §§ 101-103 (the requirements that the invention be useful, novel, and non-obvious, respectively) are substantive requirements because they describe the minimum content that must be included in a patent application. Conversely, 35 U.S.C. §§ 111-112 (the requirements for the application and specification, respectively) are merely formal

the patent examiner reviews any prior art identified by the applicant.⁵ The examiner then conducts a prior art search to ensure that the proposed patent claims are not anticipated by, or obvious in view of, that which is known by those skilled in the art⁶ ("the prior art").⁷ The prior art search is an important function of the USPTO and is paid for by the applicant through the USPTO filing fee.⁸ Upon completion of the examination, the USPTO determines whether to allow the patent application to issue into a patent.⁹

B. Obtaining a Patent Prior to Festo

Prior to the United States Court of Appeals for the Federal Circuit's decision in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co. (Festo)*,¹⁰ a patent attorney usually drafted the initial set of claims as

requirements because they relate to "the form of the application and not to the subject matter sought to be patented." *Id.*

5. MPEP, *supra* note 3, § 609, at 600-116 ("There is no requirement that an applicant for a patent make a patentability search."); 37 C.F.R. § 1.97 (2001) (stating that an applicant is required to submit an "Information Disclosure Statement" listing any information, of which he is aware, that may be material to patentability, as defined in 37 C.F.R. § 1.56(c) (2001)).

6. See MPEP, *supra* note 3, § 706.02, at 700-20 (stating that "[b]y far, the most frequent ground of rejection is on the ground of unpatentability in view of the prior art, that is, that the claimed subject matter is either not novel under 35 U.S.C. 102, or else it is obvious under 35 U.S.C. 103"); see also John M. Benassi, *Proving Patent Infringement After Festo (Or If Festo Is Reversed)*, in G-669 PRACTICING LAW INSTITUTE, PATENT LITIGATION 2001, at 363, 364 (2001) (observing that "[t]he key inquiry of patent infringement is whether the properly construed claim 'reads on' the accused device").

7. See 37 C.F.R. § 1.104 (2001) (stating that the examiner "shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention"). According to the *Manual of Patent Examining Procedure*,

After the application has been read and the claimed invention understood, a prior art search for the claimed invention is made. With the results of the prior art search, including any references provided by the applicant, the patent application should be reviewed and analyzed in conjunction with the state of the prior art to determine whether the claims define a useful, novel, nonobvious, and enabled [35 U.S.C. § 112, ¶1] invention that has been clearly described in the specification. The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity. The examiner then reviews all the evidence, including arguments and evidence responsive to any rejection, before issuing the next Office action.

MPEP, *supra* note 3, § 706, at 700-17.

8. See National Application Filing Fees, 37 C.F.R. § 1.16 (2001).

9. See MPEP, *supra* note 3, § 203.04, at 200-100.

10. 234 F.3d 558 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002).

broadly as could be supported by the application disclosure.¹¹ If the patent examiner uncovered prior art that anticipated, or made obvious, the invention recited in the originally broad claims, the patent attorney narrowed the scope of the claims by amendment.¹² Given that most patent application claims were amended because of prior art uncovered by the patent examiner,¹³ the Federal Circuit Court has traditionally been circumspect when considering whether to limit the interpretations given to amended claims.¹⁴

C. Festo Changed the Rules

In 1988, Festo Corporation (Festo) brought an action against Shoketsu Kinzoku Kogyo Kabushiki and SMC Pneumatics (collectively SMC), claiming that SMC's device infringed the claims of Festo's "Stoll patent"¹⁵ and "Carroll patent,"¹⁶ each of which relates to magnetically

11. See John A. Wasleff, *Festo Opens the Door: Case Sharply Limits Doctrine of Equivalents; Designing Around Patents Will Now Succeed More*, NAT'L L.J., Feb. 5, 2001, at C1, C21 ("Before *Festo*, only the particular subject matter surrendered by the applicant for the purpose of overcoming the prior art would be lost through estoppel.").

12. See *id.*; see also Victoria Slind-Flor, *Doctrine of Equivalents Receives Death Blow in Federal Circuit*, N.Y.L.J., Dec. 14, 2000, at 5 (quoting Harold C. Wagner as stating that "[f]or generations, some patent attorneys drafted overly broad claims and whittled the scope down to reach some compromise with the examiner . . . [but a]fter *Festo*, attorneys must come in with realistic claims as filed and seek their allowances without amendment"); Paul F. Fehlner, *A New "Biohazard" for Patent Applicants: Broad Biotechnology Patent Claims*, METRO. CORP. COUNS., Mar., 2001, at 4 ("Patent applicants walk a fine line between claiming their inventions broadly enough to block competitors, and narrowly enough to meet the criteria for patentability. Traditionally, the tendency is to err on the side of greater breadth.").

13. See, e.g., MPEP, *supra* note 3, § 706.02, at 700-19 ("By far the most frequent ground of rejection is on the ground of unpatentability in view of the prior art, that is, that the claimed subject matter is either not novel under 35 U.S.C. 102, or else it is obvious under 35 U.S.C. 103."). See also *id.* § 706.02(b), at 700-23 (observing that to overcome a § 102 rejection, the applicant may argue that the claims are patentably distinguishable from the prior art or amend the claims to distinguish his invention from the prior art).

14. See *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1363 (Fed. Cir. 1983) ("Amendment of claims is a common practice in prosecution of patent applications. No reason or warrant exists for limiting application of the doctrine of equivalents to those comparatively few claims allowed exactly as originally filed and never amended."), *quoted in* *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 871 (Fed. Cir. 1985); *Festo*, 234 F.3d at 618 (Michel, J., concurring in part, dissenting in part) ("[T]his court's imposition of a complete bar creates the perverse incentive for patent applicants . . . to simply abandon their applications. In many cases, it may be more effective to protect an invention by maintaining it as a trade secret than by accepting a patent that will publicize the invention, but provide protection only from literal infringement.").

15. U.S. Patent No. 4,354,125.

16. U.S. Patent No. 3,779,401.

coupled rodless cylinders.¹⁷ The United States District Court for the District of Massachusetts found that SMC had infringed the claims of both of Festo's patents under the doctrine of equivalents.¹⁸ The court granted summary judgment with respect to the Carroll patent claims, and a jury found infringement with respect to the Stoll patent claims.¹⁹ A Federal Circuit Court panel affirmed the judgment on appeal.²⁰ SMC appealed to the Supreme Court, which vacated the judgment and remanded the case to the Federal Circuit Court for further consideration in light of its intervening decision,²¹ *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*²² On remand, the Federal Circuit Court affirmed the district court's decision with respect to infringement of the Carroll patent claims, and it vacated and remanded for further proceedings with respect to the Stoll patent.²³ On petition by Festo, the Federal Circuit Court

17. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, No. 88CV1814, 1994 WL 1743984 (D. Mass Feb. 3, 1994), *aff'd*, 72 F.3d 857 (Fed. Cir. 1995), *cert. granted & vacated*, 520 U.S. 1111 (1997), *remanded to 117 F.3d 1385* (Fed. Cir. 1997), *and remanded to 172 F.3d 1361* (Fed. Cir. 1999), *reh'g en banc granted & vacated*, 187 F.3d 1381 (Fed. Cir. 1999), *on reh'g en banc*, 234 F.3d 558 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to 304 F.3d 1289* (Fed. Cir. 2002); *see also* Peter Corcoran, *The Scope of Claim Amendments, Prosecution History Estoppel, and the Doctrine of Equivalents After Festo VI*, 9 TEX. INTELL. PROP. L.J. 159, 161-63 (2001) (summarizing the prosecution history of *Festo*).

18. *Festo*, 1994 WL 173984, at *6. Under the doctrine of equivalents, a device or process that does not literally infringe a patent may be found to infringe if it is substantially similar to what is patented. 5A DONALD S. CHISUM, CHISUM ON PATENTS § 18.04, at 18-242 (2001). *See infra* notes 30-37 and accompanying text.

19. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 72 F.3d 857, 862 (Fed. Cir. 1995), *cert. granted & vacated*, 520 U.S. 1111 (1997), *remanded to 117 F.3d 1385* (Fed. Cir. 1997), *and remanded to 172 F.3d 1361* (Fed. Cir. 1999), *reh'g en banc granted & vacated*, 187 F.3d 1381 (Fed. Cir. 1999), *on reh'g en banc*, 234 F.3d 558 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to 304 F.3d 1289* (Fed. Cir. 2002).

20. *Festo*, 72 F.3d at 860. This panel was composed of Judges Rich, Newman, and Michael. *Id.*

21. *Shoketsu Kinzoku Kogyo Kabushiki Co. v. Festo Corp.*, 520 U.S. 1111, 1111 (1997), *remanded to 117 F.3d 1385* (Fed. Cir. 1997), *and remanded to 172 F.3d 1361* (Fed. Cir. 1999), *reh'g en banc granted & vacated*, 187 F.3d 1381 (Fed. Cir. 1999), *on reh'g en banc*, 234 F.3d 558 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to 304 F.3d 1289* (Fed. Cir. 2002).

22. 520 U.S. 17 (1997).

23. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 172 F.3d 1361, 1364 (Fed. Cir. 1999), *reh'g en banc granted & vacated*, 187 F.3d 1381 (Fed. Cir. 1999), *on reh'g en banc*, 234 F.3d 558 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to 304 F.3d 1289* (Fed. Cir. 2002).

granted a rehearing *en banc*²⁴ and held that the doctrine of equivalents does not apply to claim elements narrowed by amendment for any reason related to patentability.²⁵ The Federal Circuit Court then reversed the judgment that SMC infringed the claims of the Stoll and Carroll patents under the doctrine of equivalents.²⁶

D. Festo Should Be Reversed

This Comment first examines the Federal Circuit's *en banc* decision in *Festo* and briefly reviews the law of claim infringement, both literal and under the doctrine of equivalents, as it stands after the Supreme Court's decision in *Warner-Jenkinson*. Next, this Comment explores the *apparent pre-Festo* split in the Federal Circuit Court between the flexible and strict approaches to the application of the doctrine of equivalents and notes how *Festo* clarifies this split. This Comment then examines the impact of *Festo* and considers whether *Festo*'s complete bar on the application of the doctrine of equivalents removes a significant barrier to copyists and, therefore, is unfair to current patent holders who will be affected retroactively by the decision. Finally, this Comment argues that unless the Supreme Court clearly reaffirms the flexible approach to the application of the doctrine of equivalents, this area of patent law will remain uncertain until Congress decisively determines the scope of the doctrine of equivalents.

II. PATENT CLAIM INTERPRETATION: DEFINING THE PROPERTY RIGHT

The creator or builder of an unpatented device "has certain common law rights that accompany ownership of tangible personal property."²⁷ A patent confers the additional "right to exclude others from making, using, or selling the patented invention."²⁸ If the patent owner believes that his patent claims have been infringed, he can bring an action to

24. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 187 F.3d 1381, 1381 (Fed. Cir. 1999), *on reh'g en banc*, 234 F.3d 558 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002).

25. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 563-64 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002).

26. *Id.* at 564.

27. ROBERT L. HARMON, PATENTS AND THE FEDERAL CIRCUIT § 1.1, at 3 (4th ed. 1998).

28. *Arachnid, Inc. v. Merit Indus., Inc.*, 939 F.2d 1574, 1578 (Fed. Cir. 1991) (emphasis removed).

enjoin the infringer and seek compensation, including damages *and* prejudgment interest on those damages.²⁹

*A. The Two-Step Patent Infringement Analysis: (1) What Did You Say?
(2) What Did You (Really) Say?*

Patent infringement analysis is a two-step process.³⁰ When a party brings a complaint before a court, the court must first engage in “claim construction,” or claim interpretation, to determine exactly what the words used in the claim mean in the context of the patent specification.³¹ Second, the court must determine if the defendant’s device or process infringes a claim, as constructed, in the plaintiff’s patent.³² The court may find that the defendant’s device or process infringes the claim literally or that it infringes the claim under the judicially created doctrine of equivalents.³³ The court will find literal infringement when the defendant’s device is covered within the literal meaning of the claims as constructed by the court.³⁴ Alternatively, the court may find

29. HARMON, *supra* note 27, at 605-07. Before 1983, a successful plaintiff could expect injunctive relief and a small amount of damages; after 1983, however, a plaintiff could expect complete compensation. *Id.* In *General Motors Corp. v. Devex Corp.*, 461 U.S. 648 (1983), the Supreme Court held that “prejudgment interest on patent infringement damages should be awarded absent some justification for denying such relief.” HARMON, *supra* note 27, at 605.

30. *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1570 (Fed. Cir. 1992).

31. *Id.* at 1566, 1576 (discussing the methods the court uses to determine what the words in the claim mean); see *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384-91 (1996) (holding that patent claim interpretation is a matter of law and therefore “an issue for the judge, not the jury”); see also Benassi, *supra* note 6, at 363. To obtain a patent, the inventor must file a complete application, including a specification. 4 DONALD S. CHISUM, CHISUM ON PATENTS § 11.01 (2001). “The specification must include (a) an adequate disclosure of the invention and (b) claims.” *Id.* § 11.02[1][a]. “The construction of claims is simply a way of elaborating the normally terse language of the claims, in order to understand and explain, but not to change, the scope of the claims.” HARMON, *supra* note 27, § 5.6, at 203 (citing *Scripps Clinic & Res. Found. v. Genetech, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991)).

32. See *Minn. Mining & Mfg.*, 976 F.2d at 1570; see also HARMON, *supra* note 27, § 6.1, at 241.

33. See HARMON, *supra* note 27, § 6.3, at 269-70; see also Benassi, *supra* note 6, at 364-68 (describing literal infringement analysis and infringement analysis using the doctrine of equivalents).

34. See HARMON, *supra* note 27, § 6.2(a)(ii), at 251-52 (stating that when determining literal infringement, “[t]he claims alone delimit the right to exclude; only they may be infringed”); *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1361 (Fed. Cir. 1983) (noting that the “doctrine of equivalents comes into play only when actual literal infringement is not present”). Literal infringement is rare. See *infra* note 52 and accompanying text.

infringement under the doctrine of equivalents³⁵ by finding that the defendant's device, while not covered by the literal meaning of the claims as constructed, still infringes a claim because it is substantially equivalent to the patented device.³⁶ The plaintiff must prove infringement under the doctrine of equivalents by a preponderance of the evidence.³⁷

B. Prosecution History Estoppel: Proving What the Patent Holder Didn't (Really) Say

One tool a defendant may use to rebut a charge of infringement under the doctrine of equivalents is the doctrine of prosecution history estoppel.³⁸ Prosecution history estoppel limits the scope of a claim through review of the arguments and claim amendments made by the applicant during prosecution to overcome rejections over the prior art.³⁹ Under prosecution history estoppel, claim amendments made and arguments proffered to the USPTO during the application's prosecution "may preclude a patentee from recapturing what was foregone during prosecution of the patent application."⁴⁰ Thus, anything said during a patent's prosecution will be used against a patent holder when he later attempts to convince a court that his patent claims have been infringed under the doctrine of equivalents.⁴¹

35. Application of the doctrine of equivalents is a question of fact. *See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 591-93 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002) (Plager, J., concurring) (arguing that a better solution to the question posed in *Festo* would be to take its application out of the hands of the jury and make its application a question of law).

36. HARMON, *supra* note 27, § 6.3(a), at 270 ("The classical test for equivalence was whether the accused device performs substantially the same function in substantially the same way to obtain substantially the same result.") (footnote omitted).

37. *Hughes Aircraft*, 717 F.2d at 1361.

38. Prosecution history is "[t]he complete record of proceedings in the Patent and Trademark Office from the initial application to the issued patent." BLACK'S LAW DICTIONARY 1237 (7th ed. 1999). Patent "prosecution" refers to the activity necessary to process a patent application in the USPTO. *See id.* Prosecution history estoppel "applies to claim amendments to overcome rejections based on prior art, . . . and to arguments submitted to obtain the patent." *Hughes Aircraft*, 717 F.2d at 1362 (citation omitted); *see also* HARMON, *supra* note 27, § 6.3(b), at 295 ("[P]rosecution history estoppel will not allow the patentee to recapture through equivalence certain coverage given up during prosecution.") (footnote omitted).

39. *See Hughes Aircraft*, 717 F.2d at 1362.

40. HARMON, *supra* note 27, § 6.3(b), at 296.

41. *See* HARMON, *supra* note 27, § 6.3(b), at 298.

III. THE DEBATE ABOUT THE DOCTRINE OF EQUIVALENTS BEFORE *FESTO*: HOW SHOULD THE COURTS PROTECT PATENT HOLDERS FROM THE UNSCRUPULOUS COPYIST?

The doctrine of equivalents is justified in part because it prevents potential copyists from avoiding infringement by making insubstantial modifications to a patented device.⁴² Were courts to recognize only literal infringement of a claim, a copyist could make an unimportant change to a patented device to avoid a finding of infringement.⁴³ Critics of the doctrine of equivalents argue that the doctrine introduces uncertainty into the interpretation of patents because it is impossible to know when a device infringes a patent until litigation resolves a complaint of infringement.⁴⁴ This uncertainty chills innovation and discourages companies from engaging in incremental improvements by creating the potential for patent claim infringement suits.⁴⁵ The range of equivalents to be granted to patent claims has been the subject of much discourse, and the discussion that follows highlights the main points of the debate, which provides a background for discussion of the *Festo* opinion.⁴⁶

A. Beyond Literal Infringement: The Patent Grant Should Preclude Imperfect Copies

In *Graver Tank & Manufacturing Co. v. Linde Air Products Co.*,⁴⁷ the Supreme Court recognized that to protect patent holders from the “unscrupulous copyist,” the method for interpreting patent claims must

42. See *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 607 (1950) (arguing that the doctrine of equivalents is necessary).

43. *Id.*

44. See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 575, 577 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002) (discussing the uncertainty that has resulted from the flexible approach).

45. See *Id.* at 577.

46. See Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 990 (1997). The distinction between improvement and imitation is “critical to achiev[e] the proper balance of intellectual property rights.” *Id.* On one hand, allowing too much imitation “will stifle development and commercialization of new products.” *Id.* On the other hand, discouraging improvements too strongly will “freeze development at the first generation of products.” Compare *Winans v. Denmead*, 56 U.S. (15 How.) 330, 343 (1854) (creating judge-made law to protect patent holders from copyists who make trivial changes to inventions as described by the words of the patents), with *Festo*, 234 F.3d at 574, 577 (limiting the doctrine of equivalents to encourage incremental innovation).

47. 339 U.S. 605 (1950).

extend beyond literal claim infringement.⁴⁸ Linde Air Products, owner of patents for an electric welding process and for fluxes to be used with the process,⁴⁹ sued Graver Tank and Manufacturing, claiming that its fluxes were “identical in composition and produc[ed] the same kind and quality of weld.”⁵⁰ The Court agreed that the two compositions were “alike” even though there was a slight difference between the two fluxes.⁵¹ The Court stated that because “[o]utright and forthright duplication is a dull and very rare type of infringement,” the inquiry should focus on whether the alleged infringing device is “equivalent” to the patented device.⁵² The Court stated that the doctrine of equivalents is based on the presumption that “if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape.”⁵³ Further, because a “finding of equivalence is a determination of fact,” its determination is to be made at the trial level.⁵⁴ The Supreme Court did not formulate a rigid test, stating instead that “[e]quivalence, in the patent law, is not the prisoner of a formula and is not an absolute to be considered in a vacuum.”⁵⁵ Trial courts should consider “whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was.”⁵⁶ Thus, the Supreme Court instructed trial courts to consider

48. See *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 607 (1950).

49. See *id.* at 606-07.

50. *Id.* at 610.

51. *Id.* (stating that the unpatented flux was like the patented flux except that it substituted a non-alkaline earth metal (manganese) for the alkaline earth metal (magnesium)).

52. *Id.* at 607-08 (noting the origins of the doctrine of equivalents in *Winans v. Denmead*, 56 U.S. (15 How.) 330 (1853)). Over time, this requirement has been refined. Compare *Pennwalt Corp. v. Durand-Wayland, Inc.* 833 F.2d 931, 935 (Fed. Cir. 1987) (stating that infringement under the doctrine of equivalents is sustained only “if the presence of every element or its substantial equivalent in the accused device” is shown), with *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1364 (Fed. Cir. 1983) (stating that infringement under the doctrine of equivalents is sustained when the accused device is equivalent to the patented device as a whole).

53. See *Graver Tank*, 339 U.S. at 608 (quoting *Union Paper-Bag Mach. Co. v. Murphy*, 97 U.S. 120, 125 (1877)).

54. See *id.* at 609; FED. R. CIV. P. 52(a) (“Findings of fact, whether based on oral or documentary evidence, shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of the witnesses.”).

55. *Graver Tank*, 339 U.S. 605, 609.

56. *Id.*

patent claim infringement in the context of the infringement's occurrence.⁵⁷

However, even at this early state in the formulation of the doctrine of equivalents, there were concerns.⁵⁸ In his dissent, Justice Black criticized the majority, stating that the Court was looking to the specification "to alter a claim free from ambiguous language."⁵⁹ Although Justice Black supported the concept of the doctrine of equivalents, he argued that it should apply only in situations "where differences between the claims of the patent and the allegedly infringing product are de minimis, colorable only, and without substance."⁶⁰

*B. The Doctrine of Equivalents as Applied by the Federal Circuit:
Thoroughness Versus Efficiency*

When President Reagan signed the Federal Courts Improvement Act in 1982, the United States Court of Appeals for the Federal Circuit was created and was granted exclusive jurisdiction over patent appeals in the hope of bringing uniformity to patent law application.⁶¹ Nevertheless, the Federal Circuit Court began to inconsistently apply the doctrine of equivalents shortly after its creation.⁶² In fact, two lines of authority

57. See *id.* at 611-12 (upholding a finding of infringement by the trial court based on (1) identical operation and (2) equivalents in all respects for welding purposes). The Court further stated that "[w]ithout some explanation or indication that [the infringing item] . . . was developed by independent research, the trial court could properly infer that the accused flux is the result of imitation rather than experimentation or invention." *Id.* at 612.

58. See *id.* at 613-14 (Black, J., dissenting).

59. *Id.* at 613-14 (Black, J., dissenting) (citing *White v. Dunbar*, 119 U.S. 47, 51 (1886)) (declaring that a patent claim cannot be treated "like a nose of wax which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or something different from, what its words express").

60. *Id.* at 616.

61. S. REP. NO. 97-275, at 4 (1982), reprinted in 1978 U.S.C.C.A.N. 11, 14; see Jonathan Ringel, *20 Years of Courting Patents*, INTELL. PROP., Oct. 8, 2001, at 31, 32.

62. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 573 (Fed. Cir. 2000), cert. granted, 533 U.S. 915 (2001), vacated, 122 S. Ct. 1831 (2002), remanded to 304 F.3d 1289 (Fed. Cir. 2002) (quoting 5A DONALD S. CHISUM, CHISUM ON PATENTS, § 18.05[3][b], at 18-492 (1998), and referencing Douglas A. Strawbridge, *et al.*, Area Summary, *Patent Law Developments in the United States Court of Appeals for the Federal Circuit During 1986*, 36 AM. U. L. REV. 861, 887-88 (1987), Gregory J. Smith, *The Federal Circuit's Modern Doctrine of Equivalents in Patent Infringement*, 29 SANTA CLARA L. REV. 901, 921 (1989), and Note, *To Bar or Not to Bar: Prosecution History Estoppel After Warner-Jenkinson*, 111 HARV. L. REV. 2330, 2336 (1998)); see Ringel, *supra* note 61, at 32 (stating that the Federal Circuit Court was created to decide patent cases more uniformly, but that some argue that "the splits between regional circuits have merely been replaced by disagreements between different panels of the Federal Circuit").

emerged, each defining the scope of estoppel based on: (1) whether the patent claims were amended to exclude prior art, and (2) whether the applicant proposed arguments to distinguish the patent claims from the prior art.⁶³

1. A Flexible Approach: Determining a Specific Patent's Scope Based on the Facts Surrounding Its Prosecution

The flexible approach, championed in *Hughes Aircraft Co. v. United States*,⁶⁴ provides that amendments to patent claims during the patent prosecution process do not necessarily foreclose the possibility of patents being infringed under the doctrine of equivalents.⁶⁵ Under the flexible approach "prosecution history estoppel 'may have a limiting effect' on the doctrine of equivalents 'within a spectrum ranging from great to small to zero.'"⁶⁶ Thus, even after amending a patent claim, a range of equivalents determined by the purpose and scope of the amendment remains open to the patent holder.⁶⁷

2. A Strict Approach: Avoiding Hypothetical Patent Prosecution

The strict approach used in *Kinzenbaw v. Deere & Co.*⁶⁸ and *Prodyne Enterprises, Inc. v. Julie Pomerantz, Inc.*,⁶⁹ illustrates how the Federal

63. *Festo*, 234 F.3d at 573.

64. 717 F.2d 1351 (Fed. Cir. 1983).

65. *Id.* at 1361. Hughes claimed that the United States infringed, under the doctrine of equivalents, its patents relating to velocity control and orientation of a spin-stabilized satellite. *See id.* at 1352-61. The Federal Circuit Court stated that there was no reason to limit the application of the doctrine of equivalents to unamended claims. *Id.* at 1363. Instead, the "purpose of the amendment" would determine the degree to which the amended claim would be limited. *Id.* at 1363. The court also noted that use of new technology, such as computer technology, unavailable at the time of the patent would not bar a finding of equivalence. *Id.* at 1365. Thus, the court instituted a case-by-case review of patents to determine infringement under the doctrine of equivalents. *See id.* at 1361.

66. *Festo*, 234 F.3d at 573 (quoting *Hughes Aircraft*, 717 F.2d at 1363); *see also* *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 871 (Fed. Cir. 1985) ("[W]henver the doctrine [of equivalents] is invoked, 'a close examination must be made as to, not only what was surrendered, but also the reason for such a surrender;' the fact that the claims were narrowed 'does not always mean that the doctrine of file history estoppel completely prohibits a patentee from recapturing some of what was originally claimed.'") (quoting *Bayer Akiengesellschaft v. Duphar Int'l Research*, 738 F.2d 1237, 1243 (Fed. Cir. 1984)).

67. *See Hughes Aircraft*, 717 F.2d at 1363; Wasleff, *supra* note 12.

68. 741 F.2d 383 (Fed. Cir. 1984). In *Kinzenbaw*, the defendant, John Deere & Co., argued that the plaintiff, Kinzenbaw, had infringed under the doctrine of equivalents its patents relating to a tractor-pulled farm implement called a row planter, which uses metal disks supported by gauge wheels to cut furrows into the ground. *Id.* at 385, 389. The plaintiff argued that the prosecution history of defendant's patent prevented the court from finding infringement by equivalence because during prosecution of the patent, the

Circuit Court reacts when the prosecution history of the allegedly infringed patent precludes a determination of infringement under the doctrine of equivalents.⁷⁰ This approach is the court's response to a particular argument that the court has only heard twice; in both cases, the patent holders argued that their patents were infringed under the doctrine of equivalents because the patent claims *could have been* written in a way that avoided the prior art of record while making the allegedly infringing device literally infringe the patent.⁷¹ Under this approach, a court will not allow a patent holder to recapture surrendered subject matter by arguing that during the examination of the patent application,

defendant narrowed a patent claim to avoid a patent examiner's rejection over prior art, which disclosed a planter with adjustable gauge wheels mounted adjacent to the disks. *See id.* at 388-89. The defendant argued that it narrowed the claims by specifying that the radius of a gauge wheel was less than the radius of a disk, but that prosecution history estoppel should not apply because the amendment was unnecessary to overcome the prior art. *Id.* at 389. The court held that the plaintiff's device did not infringe and that the doctrine of prosecution history estoppel applied because this was not an "unanticipated equivalent." *Id.* The court further stated that it would not engage in a "speculative inquiry" regarding whether the patent examiner would have allowed a differently worded amendment, which would have covered plaintiff's device. *Id.*

69. 743 F.2d 1581 (Fed. Cir. 1984). This case dealt with the defendant's infringement of plaintiff's cheese slicer. *Id.* at 1582. Specifically, Prodyne's patent claimed a cheese slicer with a wire that was wrapped around one end of a U-shaped bar and held in place at the other end by a tensioning handle. *Id.* Pomerantz's allegedly infringing device included a wire "attached through a transverse, centrally disposed slot in the first leg of the bar" and "held in position by a knot in the end of the wire." *Id.* at 1583. The court held that the plaintiff was barred from a finding of infringement by equivalence by the doctrine of prosecution history estoppel because the plaintiff had substituted "looped around" for "attached" during patent prosecution, and such a substitution would lead a competitor to reasonably believe that the subject matter had been disclaimed. *Id.* The plaintiff argued that the amendment was not necessary to overcome the prior art, but the court refused to "speculate" on the necessity of the amendment. *See id.*

70. *Kinzenbaw*, 741 F.2d at 389; *Prodyne Enters.*, 743 F.2d at 1583. Arguably, the strict approach is actually nothing more than application of the flexible approach to one specific argument. *Festo*, 234 F.3d at 610 (Michel, J., concurring in part, dissenting in part); *id.* at 628 (Linn, J., concurring in part, dissenting in part). Judge Michel argued that the two cases applied the flexible bar in *Hughes Aircraft* because "the panels did indeed look to the exact scope of surrender," but "[t]hey simply found that the surrender covered the accused subject matter." *Id.* at 610. *Compare Hughes Aircraft*, 717 F.2d at 1362 (stating that Hughes was barred from arguing that the claim would have been allowed even if its language was broader because those "elements of its claims [were] unnecessary to avoid the art") (internal quotations omitted), with *Kinzenbaw*, 741 F.2d at 389 (stating that court would not speculate whether a more broadly worded claim would have been allowed over the prior art), and *Prodyne Enters.*, 743 F.2d at 1583 (same).

71. *Kinzenbaw*, 741 F.2d at 389; *Prodyne Enters.*, 743 F.2d at 1583; *see Festo*, 234 F.3d at 610 (Michel, J., concurring in part, dissenting in part) (arguing that the majority failed to "mention that the second 'line' consists of only two cases"); *see also* CHISUM, *supra* note 62, § 18.05[3][b][i], at 18-496 ("Two 1984 Federal Circuit panel decisions articulated the strict approach to estoppel.").

the applicant (now patent holder) did not need to cede so much of the originally claimed invention to overcome a patent examiner's rejection.⁷² Thus, the effect of the strict approach is to keep a patent holder from proposing *post hoc* hypothetical amendments to issued claims as a way to allow application of the doctrine of equivalents when the patent's prosecution history clearly precludes its application.⁷³

3. Strictly Flexible: A Reconciliation?

These two lines of authority can be reconciled by looking at the subject matter discussed in the two patents.⁷⁴ *Hughes Aircraft* concerned a relatively new (electronic) technology⁷⁵ whereas *Kinzenbaw* dealt exclusively with an established (mechanical) technology.⁷⁶ Thus, the differing treatment given to the doctrine of equivalents rested on how many other patents covering similar technology existed at the time.⁷⁷ Hence, the two different approaches stemmed from the contexts in which the cases arose and the relative difficulty involved in applying the doctrine of equivalents, rather than the Federal Circuit Court's general affinity or aversion to a particular approach.⁷⁸ The court's treatment of

72. See *Festo*, 234 F.3d at 573 (stating that under the strict approach the court refused to speculate whether a narrower amendment would have been allowed).

73. See *Kinzenbaw*, 741 F.2d at 389 (Fed. Cir. 1984) (stating that the court would not speculate whether a more broadly worded claim would have been allowed over the prior art); *Prodyne Enters.*, 743 F.2d at 1583 (same).

74. See *Festo*, 234 F.3d at 610-11 (Michel, J., concurring in part, dissenting in part) (arguing that *Kinzenbaw* and *Prodyne* were applications of the flexible approach that was used in *Hughes Aircraft*).

75. *Hughes Aircraft*, 717 F.2d at 1362. Hughes obtained a patent for a satellite that transmits information to Earth to allow a ground crew to calculate its position. *Id.* at 1360. NASA designed a satellite that performed the same calculation, but it performed part of the calculation in a computer located on board the satellite. *Id.* at 1360-61. The court decided that NASA's satellite infringed the Hughes patent under the doctrine of equivalents, stating that Hughes was "not required to predict all future developments which enable the practice of his invention in substantially the same way." *Id.* at 1362.

76. *Kinzenbaw*, 741 F.2d at 385 ("All five patents cover elements of a row planter, an agricultural machine that, when pulled by a tractor, opens a furrow in the soil, places seeds at appropriate intervals in the furrow, and loosely covers the seeds with moist earth.").

77. Compare *Hughes Aircraft*, 717 F.2d at 1362 (stating that that even though the Hughes invention is "not of such 'pioneer' status as to entitle the invention to the very broad range of equivalents to which pioneer inventions are normally entitled," the invention is still entitled to some range of equivalents, possibly greater than the "very narrow range of equivalents applicable to improvement patents in a crowded art"), with *Kinzenbaw*, 741 F.2d at 389 (stating that it was "inappropriate" to "enlarge the literal scope of the patent claims," given that the invention was an improvement in a crowded art).

78. See *supra* note 77.

Hughes Aircraft in *Kinzenbaw* supports this interpretation.⁷⁹ In addition, in *Prodyne Enterprises, Inc. v. Julie Pomerantz, Inc.*, a panel of the Federal Circuit Court cited both cases, using *Hughes Aircraft* to define prosecution history estoppel and *Kinzenbaw* to show that the court will not edit poorly drafted claim amendments to create infringement when none exists.⁸⁰

Furthermore, it appears that the Federal Circuit Court applies the strict approach in order to avoid engaging in a hypothetical re-prosecution of the application of the patent at issue.⁸¹ Thus, the court favors the strict approach over the flexible approach only when it seeks to avoid determining whether one of the infinite number of amendments that the plaintiff might have submitted to overcome an examiner's prior art rejection would have in fact overcome the examiner's rejection *and* caused the defendant's device to literally infringe the claim.⁸² When the court need not engage in hypothetical prosecution of a patent application when applying the doctrine of equivalents, it will use the flexible approach.⁸³

C. Warner-Jenkinson: A Clarification, a Presumption, and a Command

The cases discussed above, if not themselves indicative of an irreconcilable split, constitute the beginning of the end of a uniform application of the doctrine of equivalents within the Federal Circuit

79. See, e.g., *Kinzenbaw*, 741 F.2d at 389 ("Such enlargement [of the literal scope of the patent claim] would be particularly inappropriate here, where we deal with 'improvement patents in a crowded art.'") (quoting *Hughes Aircraft*, 717 F.2d at 1362).

80. *Prodyne Enters., Inc. v. Julie Pomerantz, Inc.*, 743 F.2d 1581, 1583 (Fed. Cir. 1983) (stating that "prosecution history estoppel precludes a patent owner from obtaining a claim construction that would resurrect subject matter surrendered during the prosecution of his patent application"). More recently, the Federal Circuit Court made pronouncements about the value of claim amendments in dicta, but the court denied any equivalents, citing *Kinzenbaw*. See, e.g., *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 868 (Fed. Cir. 1993) (noting that Wang chose to limit its claims to a single row of memory chips as opposed to a single module upon which all components are mounted and that this limitation bars infringement of any memory chip configuration not in a single row); see also 13 DONALD S. CHISUM, CHISUM ON PATENTS 5413.10, at ABS-3419 to ABS-3420 (2001).

81. *Merck & Co. v. U.S. Int'l Trade Comm'n*, 774 F.2d 483, 486 (Fed. Cir. 1985) (declining to speculate about whether a patent could be obtained without filing a terminal disclaimer containing a common ownership provision); see also *Kinzenbaw*, 741 F.2d 389; *Prodyne Enters.*, 743 F.2d at 1583.

82. See *Prodyne Enters.*, 743 F.2d at 1583 (citing *Hughes Aircraft*, 717 F.2d at 1362).

83. See *Stewart-Warner Corp. v. City of Pontiac*, 767 F.2d 1563, 1570, 1572 (Fed. Cir. 1985) (finding non-infringement where a patent claim is interpreted without discussion of patent prosecution history).

Court.⁸⁴ By 1996, significant disagreement within the Federal Circuit concerning *Graver Tank* prompted the Supreme Court to clarify the proper scope of the doctrine of equivalents in *Warner-Jenkinson*.⁸⁵

1. A Four-Fold Clarification of the Doctrine of Equivalents

In *Warner-Jenkinson*, the Supreme Court clarified four aspects of the application of the doctrine of equivalents.⁸⁶ First, the Court stated that the alleged infringing device may contain only insubstantial differences from that which is claimed in the patent.⁸⁷ Second, the Court embraced the “all-elements rule,” which states that the alleged infringing device must contain all the elements of the patented device.⁸⁸ Third, the Court stated that a proposed equivalence might not cause a claim to fall within the prior art.⁸⁹ Finally, the Court reaffirmed the doctrine of prosecution history estoppel, stating that a patent holder is precluded from claiming as an equivalent any art that was disclaimed during prosecution to avoid prior art or to address an issue related to patentability.⁹⁰

84. See CHISUM, *supra* note 62, § 18.05[3][b], at 18-492. For an early criticism of *Kinzenbaw*, see *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 871 n.7 (Fed. Cir. 1985) (stating that *Kinzenbaw* illustrates that application of the doctrine of equivalents should be performed on a case-by-case basis, “guided by equitable and public policy principles underlying the doctrines involved and by the facts of the particular case”).

85. *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 62 F.3d 1512 (Fed. Cir. 1995), *cert. granted*, 516 U.S. 1145 (1996), *rev'd & remanded* 520 U.S. 17 (1997); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997) (“The significant disagreement within the Court of Appeals for the Federal Circuit concerning the application of *Graver Tank* suggests . . . that the doctrine is not free from confusion. We therefore will endeavor to clarify the proper scope of the doctrine.”).

86. HARMON, *supra* note 27, § 6.3(b), at 299-300 (outlining the four limits imposed on the doctrine of equivalents by *Warner-Jenkinson*).

87. *Warner-Jenkinson*, 520 U.S. at 27-28, 39-40.

88. *Id.* at 29-30; *Festo*, 234 F.3d at 586 (recognizing the all-elements rule as one of the two “primary legal limitations” on the doctrine of equivalents) (citing *Warner-Jenkinson*, 520 U.S. at 39 n.8).

89. *Warner-Jenkinson*, 520 U.S. at 31 (citing *Keystone Driller Co. v. Northwest Eng'g Corp.*, 294 U.S. 42, 48 (1935)).

90. *Id.* at 30-33; *Festo*, 234 F.3d at 586 (recognizing prosecution history estoppel as the other of the two “primary legal limitations” on the doctrine of equivalents) (citing *Warner-Jenkinson*, 520 U.S. at 39 n.8); *see also, e.g.*, *Southwall Technologies, Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1578 (“A patentee may not proffer an interpretation for the purposes of litigation that would alter the indisputable public record consisting of the claims, the specification and the prosecution history, and treat the claims as a ‘nose of wax.’”) (quoting *Senmed, Inc. v. Richard-Allan Med. Indus., Inc.*, 888 F.2d 815, 819 n.8 (Fed. Cir. 1989)).

2. *A Presumption That Amendments Are Related to Patentability*

In *Warner-Jenkinson*, the Court also created a rebuttable presumption that when reviewing unexplained claim amendments, “the court should presume that the patent applicant had a substantial reason related to patentability for including the limiting element added by amendment.”⁹¹ However, the Court cautioned that where the change was not made to avoid the prior art, but instead to introduce a new element, the doctrine of equivalents may apply to the newly included element.⁹² Further, the Court reiterated the “reasonably skilled practitioner standard” discussed in *Graver Tank*,⁹³ stating that just “as the perspective of the hypothetical ‘reasonable person’ gives content to concepts such as ‘negligent’ behavior, the perspective of a skilled practitioner provides content to, and limits on, the concept of ‘equivalence.’”⁹⁴

3. *A Command To Determine Infringement Element by Element*

The Supreme Court referred to two tests for determining equivalence that had developed in Federal Circuit Court case law.⁹⁵ However, because the tests were inflexible, the Supreme Court focused on whether the alleged infringing product or process contained elements identical or equivalent to each claimed element of the patented invention.⁹⁶ Additionally, the Court cautioned against enlarging the scope of a patent claim by “go[ing] beyond the substitution of equivalent elements.”⁹⁷ Thus, the Court explained that courts should not look for overall equivalence between the claims and an allegedly infringing device; instead, they should look to see if individual elements are infringed under the doctrine of equivalents.⁹⁸

91. See *Warner-Jenkinson*, 520 U.S. at 33.

92. *Id.*

93. *Warner-Jenkinson*, 520 U.S. at 37 (discussing the “reasonably skilled practitioner standard” as developed in *Graver Tank*); see also *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) (discussing present patent practice).

94. *Warner-Jenkinson*, 520 U.S. at 36.

95. *Id.* at 39 (explaining the “insubstantial differences test” and the “triple identity test” for determining equivalence, which focus on the function an element serves, the way it is executed, and the result obtained). For other tests, see CHISUM, *supra* note 80, 5413.10, at ABS-3421.

96. *Warner-Jenkinson*, 520 U.S. at 40; see *Graver Tank*, 339 U.S. at 609.

97. *Warner-Jenkinson*, 520 U.S. at 29 (citing *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 62 F.3d 1512, 1573-1574 (1995) (Nies, J., dissenting)).

98. See *Warner-Jenkinson*, 520 U.S. at 29.

IV. THE DEBATE ABOUT THE DOCTRINE OF EQUIVALENTS AFTER *FESTO*: SHOULD WE PROTECT PATENT HOLDERS FROM THE UNSCRUPULOUS COPYIST AT ALL?

According to the majority in *Festo*, the flexible approach of *Hughes Aircraft* failed to produce consistent results that could be predicted by the marketplace.⁹⁹ The Federal Circuit Court also stated that the flexible approach failed to properly narrow an amended claim when applying prosecution history estoppel, to preserve the patent's notice function, and to promote patent law.¹⁰⁰

A. Festo Creates a Retroactive Bright-Line Rule Limiting a Finding of Infringement by Equivalents to Patent Claims That Were Not Amended During Prosecution

Because of the perceived "unworkability" of its flexible approach to the doctrine of equivalents¹⁰¹ and fears that an overbroad doctrine of equivalents may discourage technological improvements by making the outer bounds of a patent's reach uncertain,¹⁰² the *Festo* majority abandoned the flexible approach and created a bright-line rule.¹⁰³ The rule stated that any amendment to a patent claim will result in a "complete bar" to a finding of equivalents in an infringement claim.¹⁰⁴ This complete bar extends the Federal Circuit Court's strict approach to the doctrine of equivalents because the adopted position refuses to

99. See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 575 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002).

100. *Id.*

101. *Id.*

102. See Lemley, *supra* note 46, at 990-91, 1003-05 (describing the expanded protection from infringement that the doctrine of equivalents affords and stating that a balance must be struck in patent rights because "[a]llow[ing] too much imitation . . . will stifle the incentives for development and commercialization of new products"); see also Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 887, 908-09 (1990) (arguing that "broad patents do have a significant impact on the development of a technology and hence on industry structure" and citing "the broad Edison patent [which] slowed down progress in the incandescent lighting field" as the "best example" of a company with an inside track that failed to move aggressively in light of its patent protection).

103. *Festo*, 234 F.3d at 574.

104. *Id.* (holding that "prosecution history estoppel acts as a complete bar to the application of the doctrine of equivalents when an amendment has narrowed the scope of a claim for a reason related to patentability").

“speculate” on whether a narrower amendment might have been allowed, and it refuses to inquire about what the amendment disclaims.¹⁰⁵

B. Festo Limits the Enforceability of Patents Already Prosecuted

In her concurrence in *Warner-Jenkinson*, Justice Ginsburg specifically warned that the Court’s new rebuttable presumption places the burden on a patent holder to establish that amendments made during prosecution are *not* related to patentability.¹⁰⁶ Borrowing language from *Hughes Aircraft*, Justice Ginsburg cautioned that “if applied woodenly,” the decision might unfairly limit what some existing patents now cover.¹⁰⁷ At the time their patents were prosecuted, patentees had no notice that *Warner-Jenkinson* would create a presumption that unexplained amendments are made for patentability reasons; thus, patentees had no reason to memorialize explanations for all claim amendments in the prosecution history.¹⁰⁸ As a result, patentees in that situation “would have had little incentive to insist that the reasons for all modifications be memorialized in the file wrapper as they were made.”¹⁰⁹ The Federal Circuit Court’s ruling, however, does not consider current patent holders’ reliance on the well-established legal doctrine of equivalents, which creates a concern that patents prosecuted before the large penalty for claim amendments are worthless.¹¹⁰

V. WHAT A SUPREME COURT AFFIRMATION OF *FESTO* MEANS

A. Unless Reversed, Festo Applies Retroactively

Because there is no provision to grandfather patents prosecuted before *Festo*, amendments made during the prosecution of these patents will

105. See *Kinzenbaw v. Deere & Co.*, 741 F.2d 383, 389 (Fed. Cir. 1984). *Contra* *Warner-Jenkinson Co. Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997) (citing *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 62 F.3d 1512, 1573-1574 (1995) (Nies, J., dissenting)). See also discussion of strict bar approach, *supra* notes 68-73 and accompanying text.

106. *Warner-Jenkinson*, 520 U.S. at 41 (Ginsburg, J., concurring).

107. *Id.*

108. *Id.*

109. *Id.*

110. See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 620 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002) (Linn, J., concurring in part, dissenting in part); *id.* at 613-15 (Michel, J., concurring in part, dissenting in part). See generally *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605 (1950); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997); *Hughes Aircraft Co. v. United States*, 717 F.2d 1351 (Fed. Cir. 1983).

receive the same treatment as amendments made to patents prosecuted after the Federal Circuit Court's new interpretation of the doctrine of equivalents.¹¹¹ Thus, the bright-line rule is unfair to patent holders who prosecuted their applications relying on the previous and longstanding application of the doctrine of equivalents.¹¹² However, there are some limited legal options to compensate for this injustice.¹¹³

The Supreme Court has made clear that a rule interpreting federal law must be applied retroactively for the sake of uniformity.¹¹⁴ In *Harper v. Virginia Department of Taxation*,¹¹⁵ the Court held that a decision has full retroactive effect whenever it is applied to the parties before the Court.¹¹⁶ *Harper* reserved the previous test for retroactivity, articulated in *Chevron Oil Co. v. Huson*,¹¹⁷ for the unlikely case in which the Supreme Court suggests a new rule in dicta.¹¹⁸ Given the majority's tone in *Harper*, it is unlikely that the Supreme Court will create a new rule in dicta that lower courts will have discretion to apply.¹¹⁹ If the Supreme

111. *Festo*, 234 F.3d at 618-19 (Michel, J., concurring in part, dissenting in part). But see Lawrence B. Ebert, *Heads Up On "Festo" Changes*, NAT'L L.J. Feb. 5, 2001, at A21 (Col. 4) ("If *Festo* remains the law, there will be injustices to patent holders. But this is because courts apply the law at the time of their decision, not because of deficiencies in *Festo* per se.") (internal citation omitted).

112. See *supra* text accompanying note 109.

113. See *Harper v. Virginia Dep't of Taxation*, 509 U.S. 86, 97 (1993).

114. *Id.* (citation omitted).

115. 509 U.S. 86 (1993).

116. *Id.* at 98 (recognizing that there is a legal "imperative to apply a rule of federal law retroactively after the case announcing the rule has already done so") (internal quotation omitted).

117. *Chevron Oil Co. v. Huson*, 404 U.S. 97 (1971). In *Chevron Oil*, the Court articulated a three-part test to determine if a new precedent should be applied retroactively. *Id.* at 106. First, the decision "must establish a new principle of law, either by overruling clear past precedent on which litigants may have relied, or by deciding an issue of first impression whose resolution was not clearly foreshadowed." *Id.* (citation omitted). Second, the court must "look[] to the prior history of the rule in question, its purpose and effect, and whether retrospective operation will further or retard its operation." *Id.* at 107. Finally, the court must weigh the "inequity imposed by retroactive application" to make sure that retroactive application of the rule does not "produce [a] substantial inequitable result[]." *Id.*

118. *Harper*, 509 U.S. at 97 (stating that "[w]hen [the Supreme Court] applies a rule of federal law to the parties before it, that rule is the controlling interpretation of federal law and must be given full retroactive effect in all cases still open on direct review and as to all events, regardless of whether such events predate or postdate our announcement of the rule"); see *id.* (stating that this new rule will control in all cases where the court does not "reserve whether its holding should be applied to the parties before it") (quoting *James B. Beam Distilling Co. v. Georgia*, 501 U.S. 529, 539 (1991)).

119. *Harper*, 509 U.S. at 95 (citing "two basic norms of constitutional adjudication," the Court based its holding that all criminal precedent must be applied retroactively when (1) the decision about whether to make a rule of law retroactive is a "quintessentially

Court affirms *Festo* and retroactively applies a complete bar to the parties before it, the decision will have full retroactive effect in all other cases.¹²⁰ Such a decision will force courts to apply the complete bar in all future cases involving patents prosecuted before *Festo*.¹²¹

B. Unless Reversed, Festo Will Create Obstacles for Individuals and Small Businesses That Compete With Large Corporations

The majority in *Festo* was concerned, in part, because the flexible approach creates a “zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims [This barrier] discourag[es] invention only a little less than unequivocal foreclosure of the field.”¹²² Under the flexible approach, there was a perceived risk that an innovator may be found to infringe a patent claim because of the low burden on a plaintiff to prove that there are “insubstantial differences” between the patented device and the alleged infringing device.¹²³

legislative” act; and (2) “selective application of new rules violates the principle of treating similarly situated [parties] the same”) (quoting *Griffith v. Kentucky*, 479 U.S. 314, 323 (1987)).

120. See *Harper*, 509 U.S. at 105 (stating that “[p]rospective decision making is the handmaid of judicial activism, and the born enemy of *stare decisis*”); Cameron S. DeLong, Note, *Confusion in Federal Courts: Application of the Chevron Test in Retroactive-Prospective Decisions*, 1985 U. ILL. L. REV. 117, 128-36.

121. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 618-19 (Fed. Cir. 2000), cert. granted, 533 U.S. 915 (2001), vacated, 122 S. Ct. 1831 (2002), remanded to 304 F.3d 1289 (Fed. Cir. 2002) (Michel, J., concurring in part, dissenting in part).

122. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996) (quoting *Union Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942)) quoted in *Festo*, 234 F.3d at 577; see *Patently Absurd?*, THE ECONOMIST, June 21, 2001, at 40 (describing the “tragedy of the Anti-Commons” encountered in the computing, semiconductor, and information-technology sectors of the economy). “Firms now encounter a ‘thicket’ of patents that constrain their inventiveness. . . . [W]hen lots of property owners have to grant permission before a resource can be used, the result is that the resource tends to be chronically underused. In the case of patents . . . innovation is stifled.” *Id.* (internal quotations omitted).

123. *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1361 (Fed. Cir. 1983) (stating that infringement by equivalents must be proven by a preponderance of the evidence); *Festo*, 234 F.3d at 591 (Plager, J., concurring) (stating that under the flexible bar, a patent holder only needs to show that “the claimed invention and the accused product have only ‘insubstantial differences’”) (citing *Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 62 F.3d 1512, 1516-1518 (Fed. Cir. 1995) cert. granted 516 U.S. 1145 (1996), rev’d & remanded 520 U.S. 17 (1997)); *Festo*, 234 F.3d at 591 (Plager, J., concurring) (calling the insubstantial differences test a “wonderfully indeterminate phrase, lending itself to making every decision under the doctrine an individualistic choice, if not a flip of the coin”). Cf. *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997) (stating that to infringe under the doctrine of equivalents, the patent holder must show that the alleged infringing device contains each element claimed in the patented device).

Even though fewer opportunities exist for patent holders to prove infringement under the *Festo* complete bar, *Festo* does not change Federal Circuit Court precedent regarding the general application of the doctrine of equivalents to unamended claims.¹²⁴ Therefore, the problem of unpredictability in the application of the doctrine of equivalents remains. However, this unpredictability is now limited to claims that were not amended during prosecution of the patent application.¹²⁵ In response, patent attorneys and pro se applicants may be forced to draft narrower claims that do not require amendment and to later rely on the doctrine of equivalents to obtain the broadest possible scope for these claims.¹²⁶ In addition, *Festo* will probably lead more inventors to appeal marginal rejections based on the obviousness of broadly drafted claims, even though there will be additional costs.¹²⁷

Festo also allows a copyist either to make insubstantial changes to the patent to avoid infringement¹²⁸ or to substitute after-invented technology to circumvent a patent.¹²⁹ In short, *Festo* changes *when* the doctrine of equivalents can be applied, not *how* the doctrine of equivalents is applied.¹³⁰ This reduces the value of any patent with an amended claim

124. See *Festo*, 234 F.3d at 577-78 (creating a complete bar to a finding of equivalents for claims amended for any reason related to patentability and for unexplained claim amendments); see also *Turbocare Div. of Demag Delaval Turbomachinery Corp. v. Gen. Elec. Co.*, 264 F.3d 1111, 1125-26 (Fed. Cir. 2001) (holding that a claim amendment was not a narrowing amendment under the doctrine of equivalents). Cf. *Festo*, 234 F.3d at 577-78 (stating that the additional protection afforded by the flexible bar does not outweigh the cost of uncertainty to the public).

125. *Festo*, 234 F.3d at 577 (praising the virtues of the complete bar in support of the majority decision to limit the doctrine of equivalents to unamended claims).

126. *Id.* at 592-93 (Plager, J., concurring).

127. See *id.*

128. See Brief of Amicus Curiae Am. Intellectual Prop. Law Ass'n at *8, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543) available at 2002 WL 1025096 (agreeing with Judge Rader and Judge Linn that *Festo* will encourage insubstantial design arounds); *Festo*, 234 F.3d at 630 (Newman, J., concurring in part, dissenting in part) (stating that limiting patent claims to their literal meaning creates an economic disincentive for innovation, encouraging only unimportant innovation).

129. *Festo*, 234 F.3d at 619-20 (Rader, J., concurring in part, dissenting in part). Judge Rader stated that terms of art evolve over time. *Id.* at 619. Without the doctrine of equivalents, a copyist could literally circumvent a patent claim describing an invention in the terms of art of the day circumvented simply by describing an allegedly infringing device using after-invented technology and terminology. See *id.* (giving the example that the "outdated" terms "cathode" and "anode," which describe vacuum tube technology, would not literally be considered "collectors" and "emitters," which describe transistor technology, even though vacuum tubes and transistors perform the same function).

130. *Id.* at 574 ("We hold that prosecution history estoppel acts as a complete bar to the application of the doctrine of equivalents when an amendment has narrowed the scope of a claim for a reason related to patentability."); *id.* at 591 (holding that, in this case,

without addressing the Federal Circuit Court's goal of changing *how* the doctrine of equivalents should be applied.¹³¹

In the post-*Festo* world, large businesses have a marked advantage. After a small company patents an innovation, a large business can review the prosecution history for amendments to the patent claims, design around the patent by making insubstantial changes to at least one amended claim element, and then bring the product to market through its established distribution channels and brand names.¹³² Additionally, the added costs that *Festo* imposes could limit the public's access to the

prosecution history estoppel precluded any range of equivalents). *Festo* barred application of the doctrine of equivalents to amended claims, not unamended claims. *Id.* at 563-64. Specifically, *Festo* considered amended claims in the first four questions presented in the opinion, interpreting the *Warner-Jenkinson* all-elements rule in the fifth question, and failed to consider the flexible bar approach as applied to unamended claims. *Id.* Thus, the Federal Circuit Court provided no guidance on how to apply the doctrine of equivalents in cases where the claim has not been amended. *See id.* at 569 (stating that a complete bar rule exists "when a claim amendment creates prosecution history estoppel with regard to the claim element"); *id.* at 600 (Michel, J., concurring in part, dissenting in part) (calling the majority rule a "bar by amendment"); *see also* Patrick J. Flinn, *Wither Festo?*, G-669 PRACTICING LAW INSTITUTE, PATENT LITIGATION 2001, at 323, 337 (2001) (stating that "once a narrowing amendment related to patentability is made, no equivalents at all are allowed").

131. *Festo*, 234 F.3d at 620 (Linn, J., concurring in part, dissenting in part); *see supra* note 14.

132. *See* Patrick Neighly, *Weighted Scales of Justice? Two Recent IP Laws Favor the Big Guy*, AM.'S NETWORK, Feb. 1, 2001, at 22 ("Larger companies wind up with valuable lead time to design around patent applications, dedicating their larger budgets and staff to beat the startup to market and gain roughly the same IP without the pesky business of acquisition The small guy is really being handicapped here.") (internal quotation omitted). *Festo* may also have severe repercussions on the biotechnology industry. *Festo*, 234 F.3d at 617 (Michel, J., concurring in part, dissenting in part) (stating that "[c]ompletely barring resort to the doctrine of equivalents for amended claim limitations may drastically limit the scope of protection for biotechnology patents, such as those claiming a protein molecule"); *see* Brief of Amicus Curiae Celltech Group PLC. at *2, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), *available at* 2002 WL 1025107 (providing an example of how "a licensee who entered into a pre-*Festo* license can use the *Festo* complete bar to avoid paying very substantial royalties"). Additionally, small technology companies may discover that large manufacturers will design around patents rather than agree to license a patented technology (as is common practice). *See also* *Patently Absurd?*, *supra* note 122 (noting that the computer, electronic, semiconductor and information-technology sectors depend on "complex" technologies).

[I]n industries that use complex technology, the value of any particular patent depends critically on the ability to use related technologies. Since it is rare that any one company will hold all the patents involved, rival firms in complex industries depend on each other to get innovations to the market.

Id.

patent system.¹³³ The new bright-line rule “increases the cost and complexity of patent prosecution to the detriment of individual inventors, start-up companies, and others unable to bear these increased costs.”¹³⁴ The increased amount of work necessary to bring a patent to the USPTO,¹³⁵ as well as the likelihood of an increased number of rejection appeals,¹³⁶ will increase the cost of effectively prosecuting a patent.¹³⁷ The increased cost gives an advantage to large companies and individuals with ready capital at their disposal.¹³⁸

C. Unless Reversed, Festo Will Make USPTO Services Redundant and Will Create an Adversarial Patent Application Process

Festo will change the way patents are prosecuted by making USPTO services redundant.¹³⁹ This decision undermines the purpose of the

133. Margaret Quan, *Patent Pangs*, ELEC. ENG'G TIMES, Feb. 12, 2001, at 1, 22 (asserting that *Festo* “would make patent filing potentially more difficult and expensive—or possibly even prohibitive for small companies and individuals”); Brief of Amicus Curiae Am. Intellectual Prop. Law Ass’n at *17, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2002 WL 1025096; see also Nathan Vardi, *Me-Too Patents*, FORBES, Apr. 16, 2001, at 58 (“The *Festo* case, which appears headed toward the Supreme Court, is pitting large companies like IBM and Ford—who say the fuzzy equivalency doctrine encourages lawsuits—against smaller firms who worry their innovations will be ripped off.”).

134. *Festo*, 234 F.3d at 620, 624 (Linn, J., concurring in part, dissenting in part) (“[T]he majority’s new rule will substantially increase the cost of obtaining patent protection, and may in fact become prohibitively high for individual inventors and start-up companies. It will require applicants to undertake exhaustive pre-filing searches, which will not only be costly but also time consuming.”); Stephan Herrera, *Festo Case Rewrites the Rules for Biotech*, RED HERRING, June 6, 2001, at 34. (“It also will surely raise the cost of securing and protecting a patent, prompting some to conclude that the only true beneficiaries of *Festo* are lawyers.”).

135. See Quan, *supra* note 133, at 1 (stating that the increased amount of time that attorneys will need to draft an application will “make patent filing potentially more difficult and expensive—or possibly even prohibitive for small companies and individuals”).

136. See *infra* notes 158-60 and accompanying text.

137. 37 C.F.R. § 1.17(b) (2001) (setting the fee for filing a notice of appeal from the examiner to the Board of Patent Appeals and Interferences by a small entity at \$155.00).

138. In its brief, Petitioner argues that:

The drastic negative consequences attached to amendments will drive patent attorneys to (1) appeal all rejections rather than amend and accept an all-encompassing estoppel; (2) file very narrow claims to avoid the need to amend, and rely upon the doctrine of equivalents to capture subject matter not claimed; or (3) abandon the patent system altogether and rely on trade secret law.

Petitioner’s Brief, at *17, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2002 WL 1025738.

139. See Robert C. Scheinfeld & Parker H. Bagley, *Prosecution of Patents in Light of the Federal Circuit ‘Festo’ Decision*, N.Y. L.J., Jan. 24, 2001, at 3.

patent office's prior art search by changing the role of the patent office from service provider to adversary.¹⁴⁰ After *Festo*, valid substantive rejections from the patent office will not help to strengthen the patent by honing the claim language to carve out the maximum scope of protection to which the applicant is entitled.¹⁴¹ Instead, these rejections will serve to constrict the scope of the allowed claims to their literal meaning.¹⁴²

The Supreme Court has acknowledged that a patent application "constitute[s] one of the most difficult legal instruments to draw with accuracy."¹⁴³ *Festo* complicates the patent process by forcing applicants to "attempt to foresee every possible variation of the invention the patent covers, starting out with a broad claim and following it with successively narrower claims that cover every new twist," so that these narrow claims might pass muster even if the broad claims are rejected.¹⁴⁴ Thus, applicants must cover the full spectrum of broad to narrow claims in the hope that the patent examiner will allow at least one claim in light of the prior art without amendment and thereby preserve the possibility that the claim may be infringed under the doctrine of equivalents.¹⁴⁵ Executing this strategy results in increased attorney and USPTO fees and increases the number of claims in a patent without necessarily increasing the quality of disclosure.¹⁴⁶ Because a primary purpose of the patent

140. See MPEP, *supra* note 3, § 704.01, at 700-06 (stating that a patent applicant is not required to conduct a prior art search before submitting an application to the USPTO, but that such a search is part of the final examination process).

141. See *Festo*, 234 F.3d at 592 (Plager, J., concurring) (stating that the *Festo* court "attempts to limit some of the indeterminacy of the doctrine of equivalents with a set of bright line rules, trading off areas of uncertainty for a degree of rigidity"). Cf. *Autogiro Co. of Am. v. United States*, 384 F.2d 391, 399 (Ct. Cl. 1967) ("In its broader use as source material, the prior art cited in the file wrapper gives clues as to what the claims do not cover."). Even if it were possible to have every possibly relevant or tangentially relevant patent cited in the file wrapper, it would only provide a "clue" about what the claims cover. See *id.*

142. See *Festo*, 234 F.3d at 592 (Plager, J., concurring).

143. *Sperry v. Florida ex rel. Florida Bar*, 373 U.S. 379, 383 (1963) (citing *Topliff v. Topliff*, 145 U.S. 156, 171 (1892)).

144. *Quan*, *supra* note 133.

145. See *id.*

146. See *Festo*, 234 F.3d at 618 (Michel, J., concurring in part, dissenting in part) (stating that *Festo* gives companies a financial incentive to maintain their inventions as a trade secret rather than attempt to secure a patent). The Supreme Court has acknowledged that the relationship between the patent prosecutor and the USPTO must be protected to allow for frank discussions about the invention to be patented. *Beckman Instruments, Inc. v. Chemtronics, Inc.*, 439 F.2d 1369, 1379 (5th Cir. 1970).

The Patent Office, not having testing facilities of its own, must rely upon information furnished by applicants and their attorneys [A]pplicants, [stand] before the Patent Office in a confidential relationship and [are] owed the

system is complete public disclosure of inventions, this strategy is inconsistent with the patent law framework.¹⁴⁷ Additionally, the *Festo* complete bar will effectively require patent attorneys to conduct an exhaustive and costly prior art search before submitting the application to the USPTO.¹⁴⁸

Prior to *Festo*, a patent examiner's rejection of a patent application for failure to observe a statutory requirement was welcomed as a helpful critique that would ultimately strengthen the patent.¹⁴⁹ Today, post-filing claim amendments made because of statutory requirements unrelated to overcoming prior art will trigger the *Festo* complete bar.¹⁵⁰ Thus, applicants will be held to an unnecessary standard of perfection when fulfilling all administrative statutory requirements related to patentability at the moment of filing.¹⁵¹ *Festo* shifts the patent examiner's role from last stage of review for any inadvertent statutory errors to the first line of attack on the patent by creating estoppel where an applicant fails to follow statutory requirements perfectly.¹⁵² Any existing leeway between

obligation of frank and truthful disclosure [A]bsolute honesty and good faith disclosure is necessary in the filing of a patent application.

Id. (citations and internal quotations omitted). *But see* Robert J. Artuz & Edwin H. Taylor, *Preparing and Prosecuting a Patent Application That Will Stand Up in Litigation*, in G-669 PRACTICING LAW INSTITUTE, PATENT LITIGATION 2001, at 973, 991-99 (2001) (describing strategies for writing successful post-*Festo* patents, including providing a clear definition of terms).

147. *Festo*, 234 F.3d at 618 (Michel, J., concurring in part, dissenting in part) (stating that *Festo* will deprive the public of "useful teachings"); *id.* at 624 (Linn, J., concurring in part, dissenting in part). In addition to the original application filing fee, a small entity must pay \$40 for each independent claim in excess of three and \$9 for each claim in excess of twenty. 37 C.F.R. § 1.16(b)-(c) (2001).

148. *See* Quan, *supra* note 133, at 22 (speculating that patent attorneys will have to spend more time "researching the patents thoroughly to cover all the bases upfront"); Benassi, *supra* note 6, at 395-96 (stating that a thorough pre-filing prior art search will be helpful in avoiding the limiting effects of *Festo*); *see also* Stephen E. Belisle, *Patent Infringement and Right-to-Use Opinions*, in G-667 PRACTICING LAW INSTITUTE, PREPARING PATENT LEGAL OPINIONS 95 (2001) (detailing what the patent prosecutor must keep in mind when preparing patentability opinions for clients after *Festo*).

149. *See, e.g.*, *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1343-44 (Fed. Cir. 2000) (determining, in part, whether the application met the written description requirement set out in 35 U.S.C. § 112); *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 958 (Fed. Cir. 2001) (holding that a patent did not violate the best mode requirement under 35 U.S.C. § 112 and is therefore valid).

150. *Festo*, 234 F.3d at 563.

151. *Id.* at 563-64 (holding that amendments made for "other reasons related to the statutory requirements for a patent," but not made to overcome prior art, will trigger the *Festo* complete bar).

152. *See Festo*, 234 F.3d at 592 (Plager, J., concurring) (noting that "the court attempts to limit some of the indeterminacy of the doctrine [of equivalents] with a set of bright-line rules, trading off areas of uncertainty for a degree of rigidity").

patent attorneys or pro se applicants and patent examiners will disappear because amendments made in response to a rejection based on administrative statutory requirements will severely limit the scope of the final patent.¹⁵³

D. Unless Reversed, Festo Will Redirect, but Not Reduce, Litigation

In light of *Festo*, patent attorneys will advise their clients that patents, which could once be construed very broadly under the doctrine of equivalents, are now limited to their literal meaning because of narrowing amendments made during prosecution.¹⁵⁴ Thus, *Festo* will speed up many patent claim infringement suits and may initially decrease their total number.¹⁵⁵ However, as the number of claim infringement suits decreases,¹⁵⁶ there will be a likely increase in appeals from rejections during patent prosecution.¹⁵⁷ The *Festo* complete bar encourages applicants to file more claims of varying scope in an attempt to ensure that at least one claim is allowed without amendment.¹⁵⁸ However, in situations where inundating the examiner with claims is

153. Quan, *supra* note 133, at 22 (“[U]nder *Festo*, companies and the attorneys who write patents for them would not be able to make changes once the patent application is filed” without triggering the complete bar.).

154. *Festo*, 234 F.3d at 569 (holding that “[w]hen a claim amendment creates prosecution history estoppel with regard to a claim element, there is no range of equivalents available for the amended claim element”).

155. *See id.* at 598 (Michel, J., concurring in part, dissenting in part) (observing that “because most patents contain claims that were amended during prosecution, the majority’s holding effectively strips most patentees of their rights to assert infringement under the doctrine of equivalents”).

156. *Festo* does not eliminate the doctrine of equivalents; it simply adds the preliminary question of whether a claim amendment is a narrowing amendment to any claim of infringement under the doctrine of equivalents. *See, e.g.,* *Turbocare Div. of Demag Delaval Turbomachinery Corp. v. Gen. Elec. Co.*, 264 F.3d 1111, 1125-26 (Fed. Cir. 2001) (holding that cancellation of a claim containing the term “small diameter position” and substitution of a new independent claim containing the term “‘contact’ between certain surfaces” in response to a rejection was not a narrowing amendment because the specification gave “small diameter position” the meaning “contact” and remanding for further consideration of plaintiff-appellant’s claim under the doctrine of equivalents).

157. “When a patent applicant is faced with a rejection, or expects a rejection, he (or she) is master of his claims. He can stand his ground and appeal, or amend the claims.” *Festo*, 234 F.3d at 597 (Lourie, J., concurring). During the Supreme Court oral argument, attorney for Respondents (SMC) responded to a question by observing that the USPTO has not seen an increase in appeals. Tr. of Oral Argument, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), 2002 WL 22010, at 36 (U.S. Jan 8, 2002). The Justice responded that perhaps “everybody is waiting for this case.” *Id.* at 36, lines 21-22.

158. *See supra* notes 143-45 and accompanying text.

ineffective, the applicant will be forced to engage in a time-consuming and expensive appeals process¹⁵⁹ to preserve the breadth of the claims in his patent application.¹⁶⁰ These appeals will present a new burden to the patent office, “compounding an already immense backlog at the [US]PTO Board of Appeals.”¹⁶¹ Eventually, the Federal Circuit Court will also feel the increased caseload as more USPTO Board of Appeals decisions are challenged.¹⁶²

E. Unless Reversed, Festo Will Encourage Trade Secrets Over Patents

The Federal Circuit Court only addressed the unworkability and unpredictability of the doctrine of equivalents as applied to the interpretation of amended claims, even though such complaints are also valid when the doctrine of equivalents is used to interpret unamended claims.¹⁶³ The present mood of the Federal Circuit Court, evidenced by *Festo*, suggests that the court may further extend the so-called strict approach in the future by fundamentally limiting the doctrine of equivalents as applied to unamended claims.¹⁶⁴ Given the increased

159. See 37 C.F.R. §§ 1.191-1.198 (2001) (detailing the appeals process).

160. Clifton Brown, *Festo Decision Narrows Doctrine of Equivalents*, CORPORATE LEGAL TIMES, Mar., 2001, at 70. According to Charles R. Hoffmann, a partner with Hoffmann & Baron who represents Festo, “[t]he result [of *Festo*] will be a situation where a patent applicant cannot afford to give up any language.” *Id.* With the change in patent law in 1995, the patent term is measured to be twenty years from the date of filing. 35 U.S.C. § 154(a)(2) (2000). Therefore, there is an incentive to process an application swiftly. See *id.* After weighing the options, however, an attorney may conclude that a patent with a ten-year term and unamended patent claims that could make full use of the doctrine of equivalents would be much more valuable than an amended patent with a nineteen-year term. See Lawrence B. Ebert, *Heads Up On “Festo” Changes*, NAT’L L.J., Feb. 5, 2001, at A21; see also Benassi, *supra* note 6, at 401-06 (describing the time-consuming methods of overcoming a patent examiner’s rejections without losing equivalents under *Festo*).

161. Slind-Flor, *supra* note 12 (quoting Professor Janice M. Mueller of John Marshall Law School).

162. 37 C.F.R. § 1.301 (2001) (“Any applicant . . . involved in any *ex parte* reexamination proceeding . . . and dissatisfied with the decision of the Board of Patent Appeals and Interferences . . . may appeal to the U.S. Court of Appeals for the Federal Circuit.”).

163. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 592 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002) (Plager, J., concurring) (stating that the “net effect” of the application of the doctrine of equivalents is that it is not settled until the Federal Circuit Court makes a determination).

164. The majority of members of the Federal Circuit Court in *Festo* were clear that they disliked the doctrine, which indicates that the court will place more restraints on the application of the doctrine in the future. See, e.g., *id.* at 593 (Plager, J., concurring) (calling the decision in *Festo* a “second-best solution” to treating equivalents as a matter of

costs,¹⁶⁵ longer prosecution time,¹⁶⁶ and general uncertainty about the state of the law surrounding the doctrine of equivalents, some companies may decide to protect their intellectual property by maintaining it as a trade secret rather than as a patented invention.¹⁶⁷ Thus, *Festo* “foster[s]

law, not of fact); *id.* at 597 (Lourie, J., concurring) (stating that the decision brings the court’s “standard of judicial review of findings of fact made by the PTO into line with the standard of review applied to other agency decisions”); *see also* Steven Andersen, *Federal Circuit Gets Passing Marks to Date but There’s a Lot of Room for Improvement: A Report Card*, CORPORATE LEGAL TIMES, Mar. 2000, at 86. According to Frank Porcelli, chairman of the appellate practice group at Fish & Richardson in Boston and a patent law professor at Harvard:

The non-patent judges on the Court seem to look to the judges with patent backgrounds, such as Lourie or Newman, on particularly complex, technical patent law issues. But you also see a lot of experimentation by these non-patent judges when they see areas in which patent law doesn’t make sense from their perspective or it seems to be at odds with analogous non-patent law.

Id. *Festo* all but requires an extensive pre-filing prior art search to help applicants draft applications that will not need to be amended. Benassi, *supra* note 6, at 395-96. In addition, the duty to disclose information material to patentability is satisfied by the submission of an information disclosure statement, which requires an attorney to disclose the results of a private prior art search made before an application is submitted to the USPTO. 37 C.F.R. §§ 1.56(a), 1.97, 1.98 (2001). One could argue that patents disclosed on an Information Disclosure Statement provide evidence of the applicant’s attempt to overcome prior art because if the applicant did not know about the prior art, he would have drafted claims that included it. *See, e.g.,* Mycogen Plant Sci., Inc. v. Monsanto Co., 261 F.3d 1345, 1346-47 (Fed. Cir. 2001) (noting that the applicant replaced claims that had been rejected for obviousness with narrower claims); Mycogen Plant Sci., Inc. v. Monsanto Co., 252 F.3d 1306, 1319 (Fed. Cir. 2001) (same); Merck & Co. v. Mylan Pharms., Inc., 190 F.3d 1335, 1340 (Fed. Cir. 1999) (same); EMI Group N. Am., Inc. v. Intel Corp., 157 F.3d 887, 893 (Fed. Cir. 1998) (same). It is possible that a Federal Circuit Court hostile to the doctrine of equivalents might decide that disclosing patents in an information disclosure statement constitutes an attempt to avoid prior art, and following *Festo*, any claims accompanied by an information disclosure statement should not be granted any equivalents under the *Festo* complete bar. *See Festo*, 234 F.3d at 566 (holding that no equivalents will be granted when an amendment was made for a reason related to patentability, including avoiding prior art).

165. *See supra* note 164.

166. *See supra* note 164.

167. *Festo*, 234 F.3d at 618 (Michel, J., concurring in part, dissenting in part) (stating that *Festo* gives companies a financial incentive to maintain their inventions as trade secrets rather than attempt to secure a patent); *see* Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1242 (Fed. Cir. 1989) (suggesting that, barring a confidential relationship that prohibited use of a trade secret, discovery of a trade secret by reverse engineering is acceptable). Trade secrets include

information, such as the design for new piece[s] of machinery or the chemical formula for a new ingredient in a product. It could also be research materials, computer code, blueprints or other items. The only requirements are these: the owner has taken “reasonable” measures to keep the information or materials secret; and the material or information draws value from not being widely known.

concealment rather than disclosure of inventions, which is one of the primary purposes of the patent system.”¹⁶⁸

F. Unless Reversed, Festo Will Create an Irrebuttable Presumption That Unexplained Claim Amendments Are Related to Patentability

For unexplained patent amendments, *Festo* places two burdens on patent holders: 1) proving that an amendment is, in fact, explained in the prosecution history,¹⁶⁹ and 2) proving that the amendment is not related to patentability.¹⁷⁰ The requirement that a patent holder only use evidence in the patent prosecution history to prove the reason for the amendment¹⁷¹ creates a Kafkaesque¹⁷² situation in which a patent holder facing court inquiry cannot possibly rebut the presumption that there is a non-patentability reason for the unexplained amendment.¹⁷³ Because the prosecution history of a pre-*Festo* patent application was created only to illustrate the reasons for patentability, and not to document the reason for every amendment regardless of its formal or substantive character,

John Mangels, *Economic Espionage Losses in the Billions, Experts Say*, THE PLAIN DEALER, July 30, 2001, at A7, available at 2002 WL 20542223; see also *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 474-76 (1974) (discussing the “widely relied-upon definition of a trade secret found at Restatement of Torts § 757, comment *b* (1939)”).

168. *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 607 (discussing the proper method for interpreting patent claims and justifying the doctrine of equivalents as a way to protect patent holders’ rights).

169. *Festo*, 234 F.3d at 578 (stating that unexplained amendments would not be granted any equivalents).

170. *Id.* at 565 (stating that the patent holder had the burden to prove that an amendment was made for some reason other than patentability).

171. See *id.* at 586 (stating that the public notice considerations discussed in *Warner-Jenkinson* require that any inquiry into the intent of an amendment must be based solely on the prosecution history of the patent).

172. The Federal Circuit Court appears to give infringement protection for unexplained amendments under the doctrine of equivalents, but, in fact, there is no substance to this grant. Compare *id.* at 586 (“In order to give due deference to public notice considerations under the *Warner-Jenkinson* framework, a patent holder seeking to establish the reason for an amendment must base his arguments solely upon the public record of the patent’s prosecution.”), with *id.* at 632 (Newman, J., concurring in part, dissenting in part) (“[T]he majority holds that the rebuttable presumption concerning the reason for an amendment, which presumption arises when the prosecution record is silent as to the reason for the amendment, cannot be rebutted with evidence outside the prosecution record. The rebuttable presumption thereby becomes irrebuttable, because the prosecution record is necessarily silent in order for the presumption to arise at all.”). See also FRANZ KAFKA, THE TRIAL 213-18 (E.M. Butler ed., Willa & Edwin Muir trans., Schocken Books 1974) (1937) (describing one man’s journey through a secretive and formalistic legal maze where each man has a door by which to enter the law, but a gatekeeper prevents his entrance until an undisclosed, appointed time).

173. See *Festo*, 234 F.3d at 632 (Newman, J., concurring in part, dissenting in part).

the only evidence available to a pre-*Festo* patent holder to prove his case is extrinsic evidence.¹⁷⁴ Thus, *Festo* creates an irrebuttable presumption, which guarantees that pre-*Festo* patent holders with unexplained claim amendments will lose.

VI. THE SUPREME COURT SHOULD REVERSE *FESTO* OR CONGRESS SHOULD ACT

In *Warner-Jenkinson*, the Supreme Court warned against a new bright-line rule that would adversely affect pre-*Festo* patents and cautioned against judicial activism.¹⁷⁵ By eviscerating the doctrine of equivalents in *Festo*, the Federal Circuit Court has overstepped its bounds by unnecessarily changing the long-standing rules governing the application of the doctrine of equivalents on which applicants reasonably expected to rely once their applications issued into patents.¹⁷⁶ However, until the Supreme Court or Congress acts, *Festo* remains the law.¹⁷⁷

174. *Id.* at 632 (Newman, J., concurring in part, dissenting in part). *Cf. id.* at 586, n.6 (characterizing Judge Newman's concern that the majority is penalizing the patent holder by limiting evidence upon which he can rely).

175. The Supreme Court framed its argument in terms of how a change in the doctrine of equivalents would adversely affect the USPTO without mentioning the holders of the 1.2 million currently valid patents. *See Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 31-32 (1997). Thus, the Supreme Court appears to caution the Federal Circuit Court against making a poor administrative decision, but the Supreme Court is really cautioning the Federal Circuit not to legislate. *Id.* at 32.

To change so substantially the rules of the game now [by requiring a more rigid rule that invokes prosecution history estoppel regardless of the reason for the amendment] could very well subvert the various balances the [US]PTO sought to strike when issuing the numerous patents which have not yet expired and which would be affected by our decision.

Id.

176. Brown, *supra* note 160 (quoting Charles R. Hoffmann, a partner with Hoffmann & Baron who represents Festo, as stating that "[t]he Court is legislating on its own to create a law that hasn't been fully thought out in terms of the ramifications"); Brief of Amicus Curiae Am. Intellectual Prop. Law Ass'n at *10-*11, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2002 WL 1025096 (asserting that by establishing the *Festo* complete bar, the Federal Circuit Court has treated its legislative mandate as a mandate to legislate).

177. Federal Circuit Court precedent regarding patent law binds Federal District Courts. *See supra* note 61 and accompanying text. *Cf. Tr. Of Oral Argument, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), 2002 WL 22010, at *10 (U.S. Jan. 8, 2002) (suggesting that the USPTO might have the authority to create a prospective rule abolishing the doctrine of equivalents).

A. How the Supreme Court Might Correct the Federal Circuit Court's Misinterpretation of Warner-Jenkinson

In creating a bright-line rule, the Federal Circuit Court has expanded the meaning of “reasons relating to patentability”¹⁷⁸ by incorporating formal amendments not made to avoid prior art.¹⁷⁹ On certiorari, the Supreme Court has the opportunity to clarify its holding in *Warner-Jenkinson* and to determine that “reasons related to patentability” only refer to amendments that are required by a rejection based on substantive, rather than formal, requirements.¹⁸⁰ The Supreme Court could simply limit the definition of “reasons related to patentability,” but this limitation would not provide the certainty that large businesses and their attorneys want; such a holding would simply restore a pre-*Festo* landscape to the application of the doctrine of equivalents without bringing any more certainty to this area of patent law.¹⁸¹ In that situation, the Federal Circuit Court’s hostility toward the doctrine of equivalents would remain, waiting to surface in a future case.¹⁸²

178. *Warner-Jenkinson*, 520 U.S. at 33, 40 (holding that infringement under the doctrine of equivalents is not available for amendments made to a claim element for a purpose related to patentability).

179. *Festo*, 234 F.3d at 566 (holding that “a substantial reason related to patentability is not limited to overcoming or avoiding prior art but instead includes *any* reason which relates to the statutory requirements for a patent”) (emphasis in original) (internal quotations omitted). However, the Federal Circuit Court has drawn a similar distinction between amendments made to avoid prior art and amendments made for completeness or formal matters. See Petitioner’s Brief at *27, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2002 WL 1025738 (citing *Black & Decker v. Hoover Serv. Ctr.*, 886 F.2d 1285, 1294 n.13 (Fed. Cir. 1989)); *Mannesmann Demag Corp. v. Engineered Metal Prods. Co.*, 793 F.2d 1279 (Fed. Cir. 1986); *Moeller v. Ionetics, Inc.*, 749 F.2d 653 (Fed. Cir. 1986); *Hi-Life Prods., Inc. v. American Nat’l Water-Mattress Corp.*, 842 F.2d 323 (Fed. Cir. 1988)).

180. 35 U.S.C. §§ 100-104 (2000); 35 U.S.C. §§ 111-122 (2000); see also Petitioner’s Brief at *16, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025738 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966) for the proposition that patentability involves the subject matter provisions of the code only); Tr. of Oral Argument, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), 2002 WL 22010, at 5 (U.S. Jan 8, 2002).

181. See *Festo*, 234 F.3d at 575 (stating that in the twenty years since *Hughes Aircraft*, “the notice function of patent claims has become paramount, and the need for certainty as to the scope of patent protection has been emphasized”).

182. See *id.* at 593 (Plager, J., concurring) (noting that *Festo* presents a “second-best solution” because it does not change the basic rule of analysis under the doctrine of equivalents and the supposed benefits of *Festo* may not materialize and proposing that the doctrine of equivalents instead be a question of equitable law) (citing *Texas Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 988 F.2d 1165, 1173 (Fed. Cir. 1993)); see e.g., *Johnson & Johnston Assocs., Inc. v. R.E. Service Co.*, 285 F.3d 1046, 1054 (attacking the doctrine of

Alternatively, the Supreme Court could adopt one of the several suggestions proposed in the various amicus briefs.¹⁸³ One potentially workable solution, proposed by the Institute of Electrical and Electronic Engineers (IEEE) recommends creating a “foreseeable bar”¹⁸⁴ in cases where no “limiting amendments” have been made during the patent application’s prosecution.¹⁸⁵ Under this scheme, the doctrine of equivalents would apply unless the limiting effect of the language was foreseeable at the time of the amendment.¹⁸⁶ The IEEE argues that this interpretation follows Federal Circuit Court precedent and that its decisions in *Hughes Aircraft*,¹⁸⁷ *Kinzenbaw*,¹⁸⁸ and *Sage Products*¹⁸⁹ all

equivalents by stating that “when a patent drafter discloses but declines to claim subject matter,” the unclaimed subject matter is dedicated to the public).

183. See, e.g., Brief of Amicus Curiae Am. Intellectual Prop. Law Ass’n at *6, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025096 (supporting estoppel only when the surrender of the subject matter is clear and unmistakable); Brief of the Amicus Curiae United States, at *28-*29, *22-*23, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025650 (arguing for a presumption in favor of the alleged infringer that the amended claims “were narrowed by amendment, in a respect relevant to the alleged infringement, for reasons related to patentability”). “[T]he Court can place a comparable burden on the patent holder to demonstrate that the applicant’s narrowing amendments preserved a range of equivalents that provide a basis for asserting infringement.” *Id.* at *22.

184. Brief of Amicus Curiae Inst. of Elec. and Elecs. Eng’rs--United States of America at *19-*20, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025309 (stating that foreseeability is an established and well understood concept in many areas of the law: duty of care, *Palsgraf v. Long Island R.R. Co.*, 162 N.E. 99 (N.Y. 1928); civil contract damages, *Hadley v. Baxendale*, 156 Eng. Rep. 145 (1854); damages in patent cases, *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538 (Fed. Cir. 1995)).

185. Brief of Amicus Curiae Inst. of Elec. and Elecs. Eng’rs--United States of America at *4, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025309. The Justices, Petitioner, and Respondent discussed this proposal at length during oral arguments. Tr. of Oral Argument, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), 2002 WL 22010, at 7-11, 47 (U.S. Jan. 8, 2002). The foreseeable bar has gained some support in the Federal Circuit. See, e.g., *Johnson & Johnston Assocs.*, 285 F.3d at 1056-59 (Rader, J., concurring) (proposing the foreseeable bar as an alternative rationale for a finding of non-infringement under the doctrine of equivalents).

186. Brief of Amicus Curiae Inst. of Elec. and Elecs. Eng’rs--United States of America at *4, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025309.

187. *Hughes Aircraft Co. v. United States*, 717 F.2d 1351 (Fed. Cir. 1983).

188. *Kinzenbaw v. Deere & Co.*, 741 F.2d 383, 389 (Fed. Cir. 1984) (“[T]he doctrine of equivalents is designed to protect inventors from unscrupulous copyists . . . and *unanticipated* equivalents.”) (citations omitted) (emphasis added); Brief of Amicus Curiae Inst. of Elec. and Elecs. Eng’rs--United States of America at *20, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025309 (suggesting that the Federal Circuit Court’s application of *Graver Tank’s*

support a “foreseeable bar.”¹⁹⁰ Adoption of the “foreseeable bar,” or another compromise solution, might harmonize patent law with other areas of the law and thus ease the concern of some members of the Federal Circuit Court.¹⁹¹ Ultimately, however, this approach offers a temporary solution, and the same debate over the flexible and strict approaches to the application of the doctrine of equivalents will resurface when determining what “foreseeable” means in the patent law context.¹⁹²

B. Given the Property Interests at Stake, Congress Is the Proper Forum to Eliminate the Doctrine of Equivalents

Given the property rights involved, it is unlikely that the Supreme Court will affirm *Festo*.¹⁹³ However, unless the Supreme Court clearly reverses *Festo* on broad grounds, there is no guarantee that the doctrine of equivalents, as applied to unamended claims, will remain intact. This is due in large part to the Federal Circuit Court’s open hostility to the

conclusion that “the doctrine of equivalents is designed to protect inventors from unscrupulous copyists and unanticipated equivalents” in *Kinzenbaw* suggests that unforeseeable limiting effects of a claim amendment do not foreclose the use of the doctrine of equivalents).

189. *Sage Prods. v. Devon Indus.*, 126 F.3d 1420, 1425 (Fed. Cir. 1997) (stating that “between the patentee who had a clear opportunity to negotiate broader claims but did not do so, and the public at large, it is the patentee who must bear the cost of its failure to seek protection for [a] foreseeable alteration of its claimed structure”).

190. Brief of Amicus Curiae Inst. of Elec. and Elecs. Eng’rs--United States of America at *21, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831 (2002) (No. 00-1543), available at 2001 WL 1025309.

191. *See id.* at *19.

192. *See supra* notes 64-85 and accompanying text (detailing the evolution of the dispute between the application of the flexible bar and absolute bar and how this led to *Festo*).

193. *See Thomas v. Washington Gas Light Co.*, 448 U.S. 261, 272 (1980) (“The doctrine of *stare decisis* imposes a severe burden on the litigant who asks us to disavow one of our precedents. For that doctrine not only plays an important role in orderly adjudication; it also serves the broader societal interests in evenhanded, consistent, and predictable application of legal rules. When rights have been created or modified in reliance on established rules of law, the arguments against their change have special force.”) (emphasis in original) (footnotes omitted); *Abbott v. City of Los Angeles*, 326 P.2d 484, 494-95 (Cal. 1958) (stating that to “avoid injustice,” California courts should adhere to decisions which parties have relied upon in investing money or purchasing property “without regard to how it might be inclined to decide if the question were new”); Jan G. Laitos, *Legislative Retroactivity*, 52 WASH. U. J. URB. & CONTEMP. L. 81, 97-99 (1997) (providing support for the proposition that the law should not be applied retroactively); *see also Peralta v. United States*, 70 U.S. 434, 439 (1865) (stating that the “right of property, as every other valuable right, depends in a great measure for its security on the stability of judicial decisions”).

doctrine and the possibility that the court will attempt to weaken the doctrine through continued narrow interpretation of Supreme Court precedent.¹⁹⁴ Such disagreement between the Federal Circuit Court and Supreme Court would only create further uncertainty in this area of patent law.

Given the economic, and therefore political, nature of the debate over the doctrine of equivalents, at least one commentator has suggested that *Festo* will force Congress to act.¹⁹⁵ In any such congressional debate, small inventors will favor the flexible approach because it allows one patent to cover a larger inventive area, while large corporations will favor the *Festo* complete bar because they tend to file numerous incremental improvement patents as a matter of course.¹⁹⁶ In the federal judiciary, the battle between these two ideologies is pronounced, and it would surely be played out in Congress as well.¹⁹⁷ However, despite this contentious process, the legislature, not the Supreme Court, is the proper venue to attempt to eliminate the doctrine of equivalents because of the property interests that have developed in reliance on judicial doctrine.¹⁹⁸

194. See *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 593 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002) (Plager, J., concurring) (lamenting that the court did not change the basic rule of analysis under the doctrine of equivalents).

195. Scott J. Fields, *Festo and Its Aftermath*, MONDAQ BUS. BRIEFING, (Mar. 29, 2001), at <http://www.mondaq.com>, also available at 2001 WL 8987154 (“*Festo* is clearly one of the two or three most significant decisions in the history of the Federal Circuit. It remains to be seen how the Supreme Court resolves the matter. In any event, anticipate some Congressional action by this Summer.”).

196. See *supra* notes 122-138 and accompanying text.

197. Compare *Festo*, 234 F.3d at 630 (Newman, J., concurring in part, dissenting in part) (arguing that the majority’s “announced purpose of facilitating competition by restricting patentees’ access to the doctrine of equivalents has not been evaluated for its effect on the nation’s technology-based industry”), with *id.* at 597 (Lourie, J., concurring) (stating that “a majority of this court believes that important policy considerations relating to achieving the certainty contemplated by Congress justifies departing from an older unworkable rule”).

198. See *Festo*, 234 F.3d at 630 (Newman, J., concurring in part, dissenting in part) (“In acting to severely limit the doctrine of equivalents, this court has made a deliberate change in the relationship between innovator and competitor. . . . This spontaneous judicial action represents a venture into industrial policy whose consequences had been inadequately considered.”); *id.* at 618-19 (Michel, J., concurring in part, dissenting in part) (“[T]he majority’s rule will reduce the effective scope, and thus, the value of most of the 1,200,000 patents that are unexpired and enforceable.”). See generally JOHN LOCKE, *The Second Treatise of Civil Government*, in TWO TREATISES OF GOVERNMENT (Thomas I. Cook ed., Hafner Press 1947) (1690) (describing the proper role of democratic governance in a society).

VII. CONCLUSION

Festo does not address the Federal Circuit Court majority's fundamental distaste for the doctrine of equivalents. Because infringement of unamended claims under the doctrine of equivalents is still allowed, courts must continue to choose between the flexible and strict approaches when deciding cases. Thus, the current battle will continue. In addition, *Festo* introduces inequity into the law because it punishes patent holders who have reasonably relied on decades of precedent, which applied the doctrine of equivalents to all claims. *Festo* also introduces a host of practical problems into the administration of the patent system.

Thus, the Supreme Court should reverse *Festo* and clearly state that the doctrine of equivalents is an important tool that should be used in patent claim interpretation. If the Court clearly endorses the flexible approach as the method for applying the doctrine of equivalents, current patent holders' expectations will be maintained, and congressional action in the field will be unnecessary. If the Court simply reverses *Festo* on narrow grounds, it will leave open the door for future Federal Circuit Court attempts to limit the doctrine of equivalents, and Congress will be forced to act in defense of intellectual property rights.

VIII. ADDENDUM

Since this article was written, the Supreme Court, in a unanimous opinion, vacated the Federal Circuit Court's *Festo* decision.¹⁹⁹ The Court affirmed the Federal Circuit's holding that "estoppel arises from any amendment that narrows a claim to comply with the Patent Act, not only from amendments made to avoid prior art."²⁰⁰ In addition, the Court vacated the Federal Circuit's holding that, for amended claims, a complete bar to the application of the doctrine of equivalents exists if prosecution history estoppel arises.²⁰¹ The Court stated that "the doctrine of equivalents and the rule of prosecution history estoppel are settled law, and that the responsibility for changing them rests with Congress."²⁰²

199. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831, 1843 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002) (vacating the judgment of the Federal Circuit Court).

200. *Festo*, 122 S. Ct. at 1839; *Festo*, 234 F.3d at 566.

201. *Festo*, 122 S. Ct. at 1840. *Contra Festo*, 234 F.3d at 566.

202. *Festo*, 122 S. Ct. at 1841 (stating that to affirm the Federal Circuit Court's complete bar would "risk destroying the legitimate expectations of inventors in their

In affirming the Federal Circuit's holding that any reason relating to the statutory requirements for a patent gives rise to estoppel, the Court stated that the reason for making the amendment is unimportant,²⁰³ if an amendment narrows the scope of the patent, "that a narrowing amendment made to satisfy any requirement of the Patent Act *may* give rise to an estoppel."²⁰⁴ According to the Court, amendment of a claim is either an admission by the patentee that he could not "claim the broader subject matter" or that he waived his right to appeal the rejection.²⁰⁵

The Court stated that the Federal Circuit's complete bar is "inconsistent with the purpose of applying estoppel" because it does not allow for "the examination of the subject matter surrendered by [a] narrowing amendment."²⁰⁶ The Court explained that through amendment, an inventor concedes what a claim *does not* cover.²⁰⁷ However, after amendment, it still may be unclear what the claim *does* cover.²⁰⁸ The Court affirmed the presumption it had articulated in *Warner-Jenkinson* that "the patentee should bear the burden of showing that [an] amendment does not surrender [a] particular amendment in question."²⁰⁹ However, the Supreme Court provided examples of where an amendment "cannot reasonably be viewed as surrendering a particular equivalent."²¹⁰ How the Federal Circuit Court will interpret this decision remains to be seen.

property"); see *supra* notes 193-198 and accompanying text (discussing the proper role of Congress in any potential elimination of the doctrine of equivalents).

203. *Festo*, 122 S. Ct. at 1840; *Festo*, 234 F.3d at 566.

204. *Festo*, 122 S. Ct. at 1839 (emphasis added).

205. *Id.* at 1840. This approach, taken by the Supreme Court and the Federal Circuit below, is similar to the Federal Circuit's refusal to speculate on whether a narrowing amendment would have been allowed in *Kinzenbaw*. See *Kinzenbaw v. Deere & Co.*, 741 F.2d 383, 389. See generally *supra* notes 68-73 and accompanying text (discussing the so-called "strict approach" to the application of the doctrine of equivalents).

206. *Festo*, 122 S. Ct. at 1840.

207. *Id.* at 1841.

208. *Id.* The Supreme Court stated that the complete bar was unreasonable because it foreclosed a finding of equivalence in cases where the equivalents were "unforeseeable at the time of the amendment and beyond the fair interpretation of what was surrendered" in the amendment. *Id.* See generally *supra* notes 183-192 and accompanying text (discussing a proposed "foreseeable bar" to replace the *Festo* complete bar).

209. *Festo*, 122 S. Ct. at 1841-42; see *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 578 (Fed. Cir. 2000), *cert. granted*, 533 U.S. 915 (2001), *vacated*, 122 S. Ct. 1831 (2002), *remanded to* 304 F.3d 1289 (Fed. Cir. 2002).

210. *Festo*, 122 S. Ct. at 1842. According to the Court, equivalents cannot be barred if 1) the equivalent was "unforeseeable at the time of the application," 2) the equivalent was only tangentially related to the reason for the amendment, and 3) the patentee "could not reasonably be expected to have described the insubstantial substitute." *Id.*